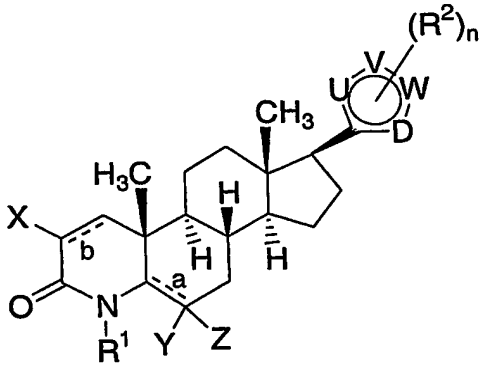
WHAT IS CLAIMED IS:

1. A compound of structural formula I:



I

a pharmaceutically acceptable salt or a stereoisomer thereof,

wherein:

a and b are each independently chosen from a double bond and a single bond;

X is hydrogen or halogen;

when a is a single bond, Y and Z are each independently chosen from hydrogen, C_{1-4} alkyl, and halogen, or Y and Z, together with the carbon atom to which they are attached, form a cyclopropyl group;

when a is a double bond, Y is chosen from hydrogen, C_{1-4} alkyl, and halogen;

n is 0, 1, 2, or 3;

U, V, W, and D are each independently chosen from CH, N, S, and O, provided that at least one of U, V, W, and D is chosen from N, S, and O, and further provided that when one of U, V, W, and D is S or O, then the other ring members are independently chosen from N and CH;

R^1 is chosen from hydrogen, CF_3, carbonyl(C_{1-3} alkyl), hydroxyl, C_{1-4} alkoxy, halogen, C_{1-3} alkyl, hydroxymethyl, and (C_{0-6} alkyl)$_2$amino, wherein said alkyl and alkoxy are each optionally substituted with one to seven fluorine atoms;

R^2 is chosen from:

halogen,

(carbonyl)$_{0-1}C_{1-10}$ alkyl,

(carbonyl)$_{0-1}C_{2-10}$ alkenyl,

(carbonyl)$_{0-1}C_{2-10}$ alkynyl,

C_{1-10} alkenylamino,

(carbonyl)$_{0-1}$aryl C_{0-10} alkyl,
C_{3-8} cycloalkyl C_{0-10} alkyl,
(C_{3-8})heterocyclyl C_{0-10} alkyl,
C_{3-8} heterocycloalkyl C_{0-10} alkyl,
C_{1-4}acylamino C_{0-10} alkyl,
C_{0-10} alkylamino C_{0-10} alkyl,
di-(C_{1-10} alkyl)amino C_{0-10} alkyl,
arylC_{0-10} alkylamino C_{0-10} alkyl,
(arylC_{0-10} alkyl)$_2$amino C_{0-10} alkyl,
C_{3-8} cycloalkyl C_{0-10} alkylamino C_{0-10} alkyl,
C_{3-8} heterocyclyl C_{0-10} alkylamino C_{0-10} alkyl,
C_{3-8} heterocycloalkyl C_{0-10} alkylamino C_{0-10} alkyl,
(C_{3-8} cycloalkyl C_{0-10} alkyl)$_2$amino C_{0-10} alkyl,
(C_{3-8} heterocyclyl C_{0-10} alkyl)$_2$amino C_{0-10} alkyl,
(C_{3-8} heterocycloalkyl C_{0-10} alkyl)$_2$amino C_{0-10} alkyl,
C_{3-8} cycloalkyl C_{0-10} alkyl aminocarbonylamino,
(C_{1-10} alkyl)$_2$aminocarbonylamino,
(aryl C_{1-10} alkyl)$_{1-2}$aminocarbonylamino,
C_{0-10} alkyl aminocarbonylamino,
C_{3-8} heterocyclyl C_{0-10} alkyl aminocarbonylamino,
C_{3-8} heterocycloalkyl C_{0-10} alkyl aminocarbonylamino,
(C_{1-10} alkyl)$_2$aminocarbonyl C_{0-10} alkyl,
(aryl C_{1-10} alkyl)$_{1-2}$aminocarbonyl C_{0-10} alkyl,
C_{0-10} alkyl aminocarbonyl C_{0-10} alkyl,
C_{3-8} cycloalkyl C_{0-10} alkyl aminocarbonyl C_{0-10} alkyl,
C_{3-8} heterocyclyl C_{0-10} alkyl aminocarbonyl C_{0-10} alkyl,
C_{3-8} heterocycloalkyl C_{0-10} alkyl aminocarbonyl C_{0-10} alkyl,
aryl C_{0-10} alkyl aminocarbonyl C_{0-10} alkyl,
C_{0-10} alkyl carbonylamino C_{0-10} alkyl,
C_{3-8} cycloalkyl C_{0-10} alkyl carbonylamino C_{0-10} alkyl,
C_{3-8} heterocyclyl C_{0-10} alkyl carbonylamino C_{0-10} alkyl,

C_{3-8} heterocycloalkyl C_{0-10} alkyl carbonylamino C_{0-10} alkyl,
aryl C_{0-10} alkyl carbonylamino C_{0-10} alkyl,
amino C_{0-10} alkyl carbimidoylC_{0-10} alkylamino,
$(C_{1-10}$ alkyl$)_2$aminocarbonyl,
(aryl C_{1-10} alkyl$)_{1-2}$aminocarbonyl,
C_{1-10} alkoxy (carbonyl)$_{0-1}C_{0-10}$ alkyl,
C_{0-10} alkylcarboxy C_{0-10} alkylamino,
carboxy C_{0-10} alkyl,
carboxy aryl,
carboxy C_{3-8} cycloalkyl,
carboxy C_{3-8} heterocyclyl,
carboxy C_{3-8} heterocycloalkyl,
C_{1-10} alkoxy,
C_{1-10}alkyloxy C_{0-10}alkyl,
aryloxy,
C_{3-8} cycloalkyloxy,
C_{3-8} heterocyclyloxy,
C_{3-8} heterocycloalkyloxy,
C_{1-10} alkylcarbonyloxy,
C_{3-8} heterocyclyl C_{0-10} alkylcarbonyloxy,
C_{3-8} heterocycloalkyl C_{0-10} alkylcarbonyloxy,
C_{3-8} cycloalkyl C_{0-10} alkylcarbonyloxy,
aryl C_{0-10} alkylcarbonyloxy,
C_{1-10} alkyloxy(carbonyl)$_{0-1}C_{0-10}$ alkylamino,
C_{3-8} heterocyclyl C_{0-10} alkyloxy(carbonyl)$_{0-1}C_{0-10}$ alkylamino,
C_{3-8} heterocycloalkyl C_{0-10} alkyloxy(carbonyl)$_{0-1}C_{0-10}$ alkylamino,
C_{3-8} cycloalkyl C_{0-10} alkyloxy(carbonyl)$_{0-1}C_{0-10}$ alkylamino,
aryl C_{0-10} alkyloxy(carbonyl)$_{0-1}C_{0-10}$ alkylamino,
$(C_{1-10}$ alkyl$)_2$aminocarbonyloxy,
(aryl C_{0-10} alkyl$)_{1-2}$aminocarbonyloxy,
(C_{3-8} heterocyclyl C_{0-10} alkyl$)_{1-2}$aminocarbonyloxy,

(C_{3-8} heterocycloalkyl C_{0-10} alkyl)$_{1-2}$aminocarbonyloxy,
(C_{3-8} cycloalkyl C_{0-10}alkyl)$_{1-2}$aminocarbonyloxy,
hydroxy C_{0-10}alkyl,
hydroxycarbonylC_{0-10}alkoxy,
hydroxycarbonylC_{0-10}alkyloxy,
C_{1-10} alkylthio,
C_{1-10} alkylsulfinyl,
aryl C_{0-10} alkylsulfinyl,
C_{3-8} heterocyclyl C_{0-10} alkylsulfinyl,
C_{3-8} heterocycloalkyl C_{0-10} alkylsulfinyl,
C_{3-8} cycloalkyl C_{0-10} alkylsulfinyl,
C_{1-10} alkylsulfonyl,
aryl C_{0-10} alkylsulfonyl,
C_{3-8} heterocyclyl C_{0-10} alkylsulfonyl,
C_{3-8} heterocycloalkyl C_{0-10} alkylsulfonyl,
C_{3-8} cycloalkyl C_{0-10} alkylsulfonyl,
C_{1-10} alkylsulfonylamino,
aryl C_{1-10} alkylsulfonylamino,
C_{3-8} heterocyclyl C_{1-10} alkylsulfonylamino,
C_{3-8} heterocycloalkyl C_{1-10} alkylsulfonylamino,
C_{3-8} cycloalkyl C_{1-10} alkylsulfonylamino,
cyano,
nitro,
perfluoroC_{1-6}alkyl, and
perfluoroC_{1-6}alkoxy, and

wherein R^2 is optionally substituted with at least one substituent, R^3, chosen from:
halogen,
(carbonyl)$_{0-1}C_{1-10}$ alkyl,
(carbonyl)$_{0-1}C_{2-10}$ alkenyl,
(carbonyl)$_{0-1}C_{2-10}$ alkynyl,
(carbonyl)$_{0-1}$aryl C_{0-10} alkyl,

C_{3-8} cycloalkyl C_{0-10} alkyl,
(C_{3-8})heterocyclyl C_{0-10} alkyl,
(C_{3-8})heterocycloalkyl C_{0-10} alkyl,
C_{1-4}acylamino C_{0-10} alkyl,
C_{0-10} alkylamino C_{0-10} alkyl,
di-(C_{1-10} alkyl)amino C_{0-10} alkyl,
arylC_{0-10} alkylamino C_{0-10} alkyl,
(arylC_{0-10} alkyl)$_2$amino C_{0-10} alkyl,
C_{3-8} cycloalkyl C_{0-10} alkylamino C_{0-10} alkyl,
C_{3-8} heterocyclyl C_{0-10} alkylamino C_{0-10} alkyl,
C_{3-8} heterocycloalkyl C_{0-10} alkylamino C_{0-10} alkyl,
C_{0-10} alkyl carbimidoylC_{0-10} alkyl,
(C_{1-10} alkyl)$_2$aminocarbonyl,
C_{1-10} alkoxy (carbonyl)$_{0-1}C_{0-10}$ alkyl,
C_{1-10}alkyloxy C_{0-10}alkyl,
(C_{1-10} alkyl)$_2$aminocarbonyloxy,
hydroxycarbonylC_{0-10}alkoxy,
(C_{1-10} alkyl)$_2$aminocarbonyloxy,
(aryl C_{0-10} alkyl)$_{1-2}$aminocarbonyloxy,
hydroxy C_{0-10}alkyl,
C_{1-10} alkylsulfonyl,
C_{1-10} alkylsulfonylamino,
aryl C_{1-10} alkylsulfonylamino,
C_{3-8} heterocyclyl C_{1-10} alkylsulfonylamino,
C_{3-8} heterocycloalkyl C_{1-10} alkylsulfonylamino,
C_{3-8} cycloalkyl C_{1-10} alkylsulfonylamino,
cyano,
nitro,
perfluoroC_{1-6}alkyl, and
perfluoroC_{1-6}alkoxy,

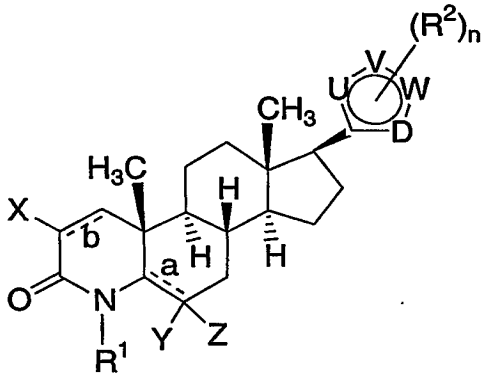
wherein R^3 is optionally substituted with one or more groups chosen from hydrogen, OH, $(C_1\text{-}6)$alkoxy, halogen, CO_2H, CN, $O(C{=}O)C_1\text{-}C_6$ alkyl, NO_2, trifluoromethoxy, trifluoroethoxy, $-O_{(0\text{-}1)}(C_1\text{-}10)$perfluoroalkyl, and NH_2.

2. A compound according to Claim 1, wherein X is fluorine.

3. A compound according to Claim 1, wherein X is hydrogen.

4. A compound according to Claim 1, wherein a is a single bond and b is a double bond.

5. A compound according to Claim 1 and of structural formula II, wherein:



II

a pharmaceutically acceptable salt or a stereoisomer thereof,

wherein:

a and b are each independently chosen from a double bond and a single bond;

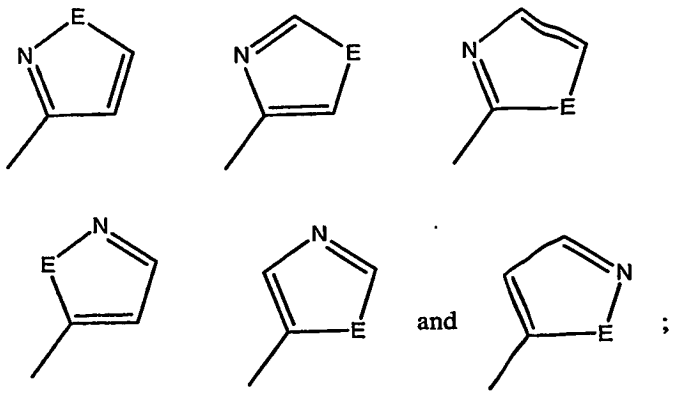
n is 0, 1, 2, or 3;

X is hydrogen or halogen;

when a is a single bond, Y and Z are each independently chosen from hydrogen, $C_{1\text{-}4}$ alkyl, and halogen, or Y and Z, together with the carbon atom to which they are attached, form a cyclopropyl group;

when a is a double bond, Y is chosen from hydrogen, $C_{1\text{-}4}$ alkyl, and halogen;

is chosen from:



;

E is S or O;

R^1 is chosen from: hydrogen, CF_3, carbonyl(C_{1-3} alkyl), hydroxyl, C_{1-4} alkoxy, halogen, C_{1-3} alkyl, hydroxymethyl, and (C_{0-6} alkyl)$_2$amino, wherein said alkyl and alkoxy are each optionally substituted with one to seven fluorine atoms;

R^2 is chosen from:

halogen,

(carbonyl)$_{0-1}C_{1-10}$ alkyl,

(carbonyl)$_{0-1}C_{2-10}$ alkenyl,

(carbonyl)$_{0-1}C_{2-10}$ alkynyl,

C_{1-10} alkenylamino,

(carbonyl)$_{0-1}$aryl C_{0-10} alkyl,

C_{3-8} cycloalkyl C_{0-10} alkyl,

(C_{3-8})heterocyclyl C_{0-10} alkyl,

C_{3-8} heterocycloalkyl C_{0-10} alkyl,

C_{1-4}acylamino C_{0-10} alkyl,

C_{0-10} alkylamino C_{0-10} alkyl,

di-(C_{1-10} alkyl)amino C_{0-10} alkyl,

arylC_{0-10} alkylamino C_{0-10} alkyl,

(arylC_{0-10} alkyl)$_2$amino C_{0-10} alkyl,

C_{1-10} alkoxy (carbonyl)$_{0-1}C_{0-10}$ alkyl,

C_{3-8} cycloalkyl C_{0-10} alkylamino C_{0-10} alkyl,

C_{3-8} heterocyclyl C_{0-10} alkylamino C_{0-10} alkyl,

C_{3-8} heterocycloalkyl C_{0-10} alkylamino C_{0-10} alkyl,

(C_{3-8} cycloalkyl C_{0-10} alkyl)$_2$amino C_{0-10} alkyl,
(C_{3-8} heterocyclyl C_{0-10} alkyl)$_2$amino C_{0-10} alkyl,
(C_{3-8} heterocycloalkyl C_{0-10} alkyl)$_2$amino C_{0-10} alkyl,
C_{3-8} cycloalkyl C_{0-10} alkyl aminocarbonylamino,
(C_{1-10} alkyl)$_2$aminocarbonylamino,
(aryl C_{1-10} alkyl)$_{1-2}$aminocarbonylamino,
C_{0-10} alkyl aminocarbonylamino,
C_{3-8} heterocyclyl C_{0-10} alkyl aminocarbonylamino,
C_{3-8} heterocycloalkyl C_{0-10} alkyl aminocarbonylamino,
(C_{1-10} alkyl)$_2$aminocarbonyl C_{0-10} alkyl,
(aryl C_{1-10} alkyl)$_{1-2}$aminocarbonyl C_{0-10} alkyl,
C_{0-10} alkyl aminocarbonyl C_{0-10} alkyl,
C_{3-8} cycloalkyl C_{0-10} alkyl aminocarbonyl C_{0-10} alkyl,
C_{3-8} heterocyclyl C_{0-10} alkyl aminocarbonyl C_{0-10} alkyl,
C_{3-8} heterocycloalkyl C_{0-10} alkyl aminocarbonyl C_{0-10} alkyl,
aryl C_{0-10} alkyl aminocarbonyl C_{0-10} alkyl,
C_{0-10} alkyl carbonylamino C_{0-10} alkyl,
C_{3-8} cycloalkyl C_{0-10} alkyl carbonylamino C_{0-10} alkyl,
C_{3-8} heterocyclyl C_{0-10} alkyl carbonylamino C_{0-10} alkyl,
C_{3-8} heterocycloalkyl C_{0-10} alkyl carbonylamino C_{0-10} alkyl,
aryl C_{0-10} alkyl carbonylamino C_{0-10} alkyl,
amino C_{0-10} alkyl carbimidoylC_{0-10} alkylamino,
(C_{1-10} alkyl)$_2$aminocarbonyl,
(aryl C_{1-10} alkyl)$_{1-2}$aminocarbonyl,
C_{1-10} alkoxy (carbonyl)$_{0-1}C_{0-10}$ alkyl,
C_{0-10} alkylcarboxy C_{0-10} alkylamino,
carboxy C_{0-10} alkyl,
carboxy aryl,
carboxy C_{3-8} cycloalkyl,
carboxy C_{3-8} heterocyclyl,
carboxy C_{3-8} heterocycloalkyl,

C_{1-10} alkoxy,

C_{1-10}alkyloxy C_{0-10}alkyl,

aryloxy,

C_{3-8} cycloalkyloxy,

C_{3-8} heterocyclyloxy,

C_{3-8} heterocycloalkyloxy,

C_{1-10} alkylcarbonyloxy,

C_{3-8} heterocyclyl C_{0-10} alkylcarbonyloxy,

C_{3-8} heterocycloalkyl C_{0-10} alkylcarbonyloxy,

C_{3-8} cycloalkyl C_{0-10} alkylcarbonyloxy,

aryl C_{0-10} alkylcarbonyloxy,

C_{1-10} alkyloxy(carbonyl)$_{0-1}$$C_{0-10}$ alkylamino,

C_{3-8} heterocyclyl C_{0-10} alkyloxy(carbonyl)$_{0-1}$$C_{0-10}$ alkylamino,

C_{3-8} heterocycloalkyl C_{0-10} alkyloxy(carbonyl)$_{0-1}$$C_{0-10}$ alkylamino,

C_{3-8} cycloalkyl C_{0-10} alkyloxy(carbonyl)$_{0-1}$$C_{0-10}$ alkylamino,

aryl C_{0-10} alkyloxy(carbonyl)$_{0-1}$$C_{0-10}$ alkylamino,

(C_{1-10} alkyl)$_2$aminocarbonyloxy,

(aryl C_{0-10} alkyl)$_{1-2}$aminocarbonyloxy,

(C_{3-8} heterocyclyl C_{0-10} alkyl)$_{1-2}$aminocarbonyloxy,

(C_{3-8} heterocycloalkyl C_{0-10} alkyl)$_{1-2}$aminocarbonyloxy,

(C_{3-8} cycloalkyl C_{0-10}alkyl)$_{1-2}$aminocarbonyloxy,

hydroxy C_{0-10}alkyl,

hydroxycarbonylC_{0-10}alkoxy,

hydroxycarbonylC_{0-10}alkyloxy,

C_{1-10} alkylthio,

C_{1-10} alkylsulfinyl,

aryl C_{0-10} alkylsulfinyl,

C_{3-8} heterocyclyl C_{0-10} alkylsulfinyl,

C_{3-8} heterocycloalkyl C_{0-10} alkylsulfinyl,

C_{3-8} cycloalkyl C_{0-10} alkylsulfinyl,

C_{1-10} alkylsulfonyl,

aryl C_{0-10} alkylsulfonyl,

C_{3-8} heterocyclyl C_{0-10} alkylsulfonyl,

C_{3-8} heterocycloalkyl C_{0-10} alkylsulfonyl,.

C_{3-8} cycloalkyl C_{0-10} alkylsulfonyl,

C_{1-10} alkylsulfonylamino,

aryl C_{1-10} alkylsulfonylamino,

C_{3-8} heterocyclyl C_{1-10} alkylsulfonylamino,

C_{3-8} heterocycloalkyl C_{1-10} alkylsulfonylamino,

C_{3-8} cycloalkyl C_{1-10} alkylsulfonylamino,

cyano,

nitro,

perfluoroC_{1-6}alkyl, and

perfluoroC_{1-6}alkoxy, and

wherein R^2 is optionally substituted with at least one substituent R^3;

R^3 is chosen from:

halogen,

(carbonyl)$_{0-1}C_{1-10}$ alkyl,

(carbonyl)$_{0-1}C_{2-10}$ alkenyl,

(carbonyl)$_{0-1}C_{2-10}$ alkynyl,

(carbonyl)$_{0-1}$aryl C_{0-10} alkyl,

C_{3-8} cycloalkyl C_{0-10} alkyl,

(C_{3-8})heterocyclyl C_{0-10} alkyl,

(C_{3-8})heterocycloalkyl C_{0-10} alkyl,

C_{1-4}acylamino C_{0-10} alkyl,

C_{0-10} alkylamino C_{0-10} alkyl,

di-(C_{1-10} alkyl)amino C_{0-10} alkyl,

arylC_{0-10} alkylamino C_{0-10} alkyl,

(arylC_{0-10} alkyl)$_2$amino C_{0-10} alkyl,

C_{3-8} cycloalkyl C_{0-10} alkylamino C_{0-10} alkyl,

C_{3-8} heterocyclyl C_{0-10} alkylamino C_{0-10} alkyl,

C_{3-8} heterocycloalkyl C_{0-10} alkylamino C_{0-10} alkyl,

C_{0-10} alkyl carbimidoylC_{0-10} alkyl,
(C_{1-10} alkyl)$_2$aminocarbonyl,
C_{1-10} alkoxy (carbonyl)$_{0-1}C_{0-10}$ alkyl,
C_{1-10}alkyloxy C_{0-10}alkyl,
(C_{1-10} alkyl)$_2$aminocarbonyloxy,
hydroxycarbonylC_{0-10}alkoxy,
(C_{1-10} alkyl)$_2$aminocarbonyloxy,
(aryl C_{0-10} alkyl)$_{1-2}$aminocarbonyloxy,
hydroxy C_{0-10}alkyl,
C_{1-10} alkylsulfonyl,
C_{1-10} alkylsulfonylamino,
aryl C_{1-10} alkylsulfonylamino,
C_{3-8} heterocyclyl C_{1-10} alkylsulfonylamino,
C_{3-8} heterocycloalkyl C_{1-10} alkylsulfonylamino,
C_{3-8} cycloalkyl C_{1-10} alkylsulfonylamino,
cyano,
nitro,
perfluoroC_{1-6}alkyl, and
perfluoroC_{1-6}alkoxy,

wherein R^3 is optionally substituted with one or more groups chosen from hydrogen, OH, (C_{1-6})alkoxy, halogen, CO_2H, CN, O(C=O)C_1-C_6 alkyl, NO_2, trifluoromethoxy, trifluoroethoxy, -$O_{(0-1)}$(C_{1-10})perfluoroalkyl, and NH_2.

6. A compound according to Claim 5, wherein R^1 is chosen from: hydrogen, CF_3, hydroxyl, and C_{1-3} alkyl optionally substituted with one to seven fluorine atoms.

7. A compound according to Claim 6, wherein R^1 is chosen from: hydrogen and C_{1-3} alkyl.

8. A compound according to Claim 7, wherein R^1 is methyl.

9. A compound according to Claim 8, wherein R^2 is chosen from:

halogen,

(carbonyl)$_{0-1}$C$_{1-10}$ alkyl,

(carbonyl)$_{0-1}$C$_{2-10}$ alkenyl,

(carbonyl)$_{0-1}$C$_{2-10}$ alkynyl,

C$_{1-10}$ alkenylamino,

(carbonyl)$_{0-1}$aryl C$_{0-10}$ alkyl,

C$_{3-8}$ cycloalkyl C$_{0-10}$ alkyl,

(C$_{3-8}$)heterocyclyl C$_{0-10}$ alkyl,

C$_{3-8}$ heterocycloalkyl C$_{0-10}$ alkyl,

C$_{1-4}$ acylamino C$_{0-10}$ alkyl,

C$_{0-10}$ alkylamino C$_{0-10}$ alkyl,

di-(C$_{1-10}$ alkyl)amino C$_{0-10}$ alkyl,

arylC$_{0-10}$ alkylamino C$_{0-10}$ alkyl,

(arylC$_{0-10}$ alkyl)$_2$amino C$_{0-10}$ alkyl,

C$_{3-8}$ cycloalkyl C$_{0-10}$ alkylamino C$_{0-10}$ alkyl,

C$_{3-8}$ heterocyclyl C$_{0-10}$ alkylamino C$_{0-10}$ alkyl,

C$_{3-8}$ heterocycloalkyl C$_{0-10}$ alkylamino C$_{0-10}$ alkyl,

(C$_{3-8}$ cycloalkyl C$_{0-10}$ alkyl)$_2$amino C$_{0-10}$ alkyl,

(C$_{3-8}$ heterocyclyl C$_{0-10}$ alkyl)$_2$amino C$_{0-10}$ alkyl,

(C$_{3-8}$ heterocycloalkyl C$_{0-10}$ alkyl)$_2$amino C$_{0-10}$ alkyl,

C$_{3-8}$ cycloalkyl C$_{0-10}$ alkyl aminocarbonylamino,

(C$_{1-10}$ alkyl)$_2$aminocarbonylamino,

(aryl C$_{1-10}$ alkyl)$_{1-2}$aminocarbonylamino,

C$_{0-10}$ alkyl aminocarbonylamino,

C$_{3-8}$ heterocyclyl C$_{0-10}$ alkyl aminocarbonylamino,

C$_{3-8}$ heterocycloalkyl C$_{0-10}$ alkyl aminocarbonylamino,

C$_{0-10}$ alkyl carbonylamino C$_{0-10}$ alkyl,

C$_{3-8}$ cycloalkyl C$_{0-10}$ alkyl carbonylamino C$_{0-10}$ alkyl,

C$_{3-8}$ heterocyclyl C$_{0-10}$ alkyl carbonylamino C$_{0-10}$ alkyl,

C$_{3-8}$ heterocycloalkyl C$_{0-10}$ alkyl carbonylamino C$_{0-10}$ alkyl,

aryl C_{0-10} alkyl carbonylamino C_{0-10} alkyl,

amino C_{0-10} alkyl carbimidoylC_{0-10} alkylamino,

C_{0-10} alkylcarboxy C_{0-10} alkylamino,

C_{1-10} alkyloxy(carbonyl)$_{0-1}C_{0-10}$ alkylamino,

C_{3-8} heterocyclyl C_{0-10} alkyloxy(carbonyl)$_{0-1}C_{0-10}$ alkylamino,

C_{3-8} heterocycloalkyl C_{0-10} alkyloxy(carbonyl)$_{0-1}C_{0-10}$ alkylamino,

C_{3-8} cycloalkyl C_{0-10} alkyloxy(carbonyl)$_{0-1}C_{0-10}$ alkylamino,

aryl C_{0-10} alkyloxy(carbonyl)$_{0-1}C_{0-10}$ alkylamino,

C_{1-10} alkylsulfonylamino,

aryl C_{1-10} alkylsulfonylamino,

C_{3-8} heterocyclyl C_{1-10} alkylsulfonylamino,

C_{3-8} heterocycloalkyl C_{1-10} alkylsulfonylamino,

C_{3-8} cycloalkyl C_{1-10} alkylsulfonylamino,

cyano,

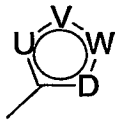
nitro,

perfluoroC_{1-6}alkyl, and

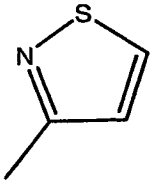
perfluoroC_{1-6}alkoxy, and

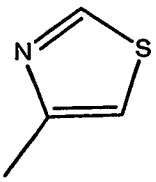
wherein R^2 is optionally substituted with at least one substituent R^3.

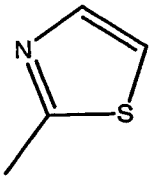
10. A compound according to Claim 9, wherein E is S.

11. A compound according to Claim 10, wherein 

is:





and 

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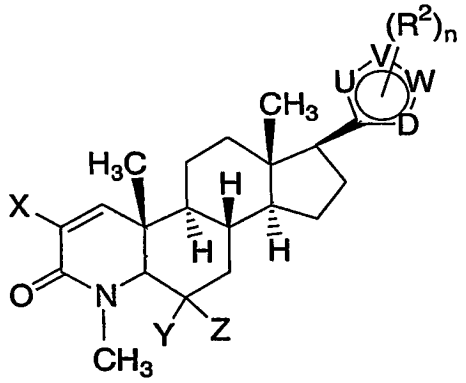
12. A compound according to Claim 11, wherein b is a double bond.

13. A compound according to Claim 12, wherein a is a single bond and b is a double bond.

14. A compound according to Claim 1 and of structural formula III,



III

a pharmaceutically acceptable salt or a stereoisomer thereof, wherein:

X is hydrogen or halogen;

n is 0, 1, 2, or 3;

Y and Z are each independently chosen from hydrogen, C_{1-4} alkyl, and halogen, or Y and Z, together with the carbon atom to which they are attached, form a cyclopropyl group;

U, V, W, and D are each independently chosen from N and CH, provided that at least one of U, V, W, and D is CH;

R^2 is chosen from:

halogen,

(carbonyl)$_{0-1}C_{1-10}$ alkyl,

(carbonyl)$_{0-1}C_{2-10}$ alkenyl,

(carbonyl)$_{0-1}C_{2-10}$ alkynyl,

C_{1-10} alkenylamino,

(carbonyl)$_{0-1}$aryl C_{0-10} alkyl,

C_{3-8} cycloalkyl C_{0-10} alkyl,

(C_{3-8})heterocyclyl C_{0-10} alkyl,

C_{3-8} heterocycloalkyl C_{0-10} alkyl,

C_{1-4}acylamino C_{0-10} alkyl,

C_{0-10} alkylamino C_{0-10} alkyl,
di-(C_{1-10} alkyl)amino C_{0-10} alkyl,
arylC_{0-10} alkylamino C_{0-10} alkyl,
(arylC_{0-10} alkyl)$_2$amino C_{0-10} alkyl,
C_{3-8} cycloalkyl C_{0-10} alkylamino C_{0-10} alkyl,
C_{3-8} heterocyclyl C_{0-10} alkylamino C_{0-10} alkyl,
C_{3-8} heterocycloalkyl C_{0-10} alkylamino C_{0-10} alkyl,
(C_{3-8} cycloalkyl C_{0-10} alkyl)$_2$amino C_{0-10} alkyl,
(C_{3-8} heterocyclyl C_{0-10} alkyl)$_2$amino C_{0-10} alkyl,
(C_{3-8} heterocycloalkyl C_{0-10} alkyl)$_2$amino C_{0-10} alkyl,
C_{3-8} cycloalkyl C_{0-10} alkyl aminocarbonylamino,
(C_{1-10} alkyl)$_2$aminocarbonylamino,
(aryl C_{1-10} alkyl)$_{1-2}$aminocarbonylamino,
C_{0-10} alkyl aminocarbonylamino,
C_{3-8} heterocyclyl C_{0-10} alkyl aminocarbonylamino,
C_{3-8} heterocycloalkyl C_{0-10} alkyl aminocarbonylamino,
(C_{1-10} alkyl)$_2$aminocarbonyl C_{0-10} alkyl,
(aryl C_{1-10} alkyl)$_{1-2}$aminocarbonyl C_{0-10} alkyl,
C_{0-10} alkyl aminocarbonyl C_{0-10} alkyl,
C_{3-8} cycloalkyl C_{0-10} alkyl aminocarbonyl C_{0-10} alkyl,
C_{3-8} heterocyclyl C_{0-10} alkyl aminocarbonyl C_{0-10} alkyl,
C_{3-8} heterocycloalkyl C_{0-10} alkyl aminocarbonyl C_{0-10} alkyl,
aryl C_{0-10} alkyl aminocarbonyl C_{0-10} alkyl,
C_{0-10} alkyl carbonylamino C_{0-10} alkyl,
C_{3-8} cycloalkyl C_{0-10} alkyl carbonylamino C_{0-10} alkyl,
C_{3-8} heterocyclyl C_{0-10} alkyl carbonylamino C_{0-10} alkyl,
C_{3-8} heterocycloalkyl C_{0-10} alkyl carbonylamino C_{0-10} alkyl,
aryl C_{0-10} alkyl carbonylamino C_{0-10} alkyl,
amino C_{0-10} alkyl carbimidoylC_{0-10} alkylamino,
(C_{1-10} alkyl)$_2$aminocarbonyl,
(aryl C_{1-10} alkyl)$_{1-2}$aminocarbonyl,

C_{1-10} alkoxy (carbonyl)$_{0-1}C_{0-10}$ alkyl,

C_{0-10} alkylcarboxy C_{0-10} alkylamino,

carboxy C_{0-10} alkyl,

carboxy aryl,

carboxy C_{3-8} cycloalkyl,

carboxy C_{3-8} heterocyclyl,

carboxy C_{3-8} heterocycloalkyl,

C_{1-10} alkoxy,

C_{1-10}alkyloxy C_{0-10}alkyl,

aryloxy,

C_{3-8} cycloalkyloxy,

C_{3-8} heterocyclyloxy,

C_{3-8} heterocycloalkyloxy,

C_{1-10} alkylcarbonyloxy,

C_{3-8} heterocyclyl C_{0-10} alkylcarbonyloxy,

C_{3-8} heterocycloalkyl C_{0-10} alkylcarbonyloxy,

C_{3-8} cycloalkyl C_{0-10} alkylcarbonyloxy,

aryl C_{0-10} alkylcarbonyloxy,

C_{1-10} alkyloxy(carbonyl)$_{0-1}C_{0-10}$ alkylamino,

C_{3-8} heterocyclyl C_{0-10} alkyloxy(carbonyl)$_{0-1}C_{0-10}$ alkylamino,

C_{3-8} heterocycloalkyl C_{0-10} alkyloxy(carbonyl)$_{0-1}C_{0-10}$ alkylamino,

C_{3-8} cycloalkyl C_{0-10} alkyloxy(carbonyl)$_{0-1}C_{0-10}$ alkylamino,

aryl C_{0-10} alkyloxy(carbonyl)$_{0-1}C_{0-10}$ alkylamino,

(C_{1-10} alkyl)$_2$aminocarbonyloxy,

(aryl C_{0-10} alkyl)$_{1-2}$aminocarbonyloxy,

(C_{3-8} heterocyclyl C_{0-10} alkyl)$_{1-2}$aminocarbonyloxy,

(C_{3-8} heterocycloalkyl C_{0-10} alkyl)$_{1-2}$aminocarbonyloxy,

(C_{3-8} cycloalkyl C_{0-10}alkyl)$_{1-2}$aminocarbonyloxy,

hydroxy C_{0-10}alkyl,

hydroxycarbonylC_{0-10}alkoxy,

hydroxycarbonylC_{0-10}alkyloxy,

C_{1-10} alkylthio,
C_{1-10} alkylsulfinyl,
aryl C_{0-10} alkylsulfinyl,
C_{3-8} heterocyclyl C_{0-10} alkylsulfinyl,
C_{3-8} heterocycloalkyl C_{0-10} alkylsulfinyl,
C_{3-8} cycloalkyl C_{0-10} alkylsulfinyl,
C_{1-10} alkylsulfonyl,
aryl C_{0-10} alkylsulfonyl,
C_{3-8} heterocyclyl C_{0-10} alkylsulfonyl,
C_{3-8} heterocycloalkyl C_{0-10} alkylsulfonyl,
C_{3-8} cycloalkyl C_{0-10} alkylsulfonyl,
C_{1-10} alkylsulfonylamino,
aryl C_{1-10} alkylsulfonylamino,
C_{3-8} heterocyclyl C_{1-10} alkylsulfonylamino,
C_{3-8} heterocycloalkyl C_{1-10} alkylsulfonylamino,
C_{3-8} cycloalkyl C_{1-10} alkylsulfonylamino,
cyano,
nitro,
perfluoroC_{1-6}alkyl, and
perfluoroC_{1-6}alkoxy, and

wherein R^2 is optionally substituted with at least one substituent, R^3, chosen from:

halogen,
(carbonyl)$_{0-1}C_{1-10}$ alkyl,
(carbonyl)$_{0-1}C_{2-10}$ alkenyl,
(carbonyl)$_{0-1}C_{2-10}$ alkynyl,
(carbonyl)$_{0-1}$aryl C_{0-10} alkyl,
C_{3-8} cycloalkyl C_{0-10} alkyl,
(C_{3-8})heterocyclyl C_{0-10} alkyl,
(C_{3-8})heterocycloalkyl C_{0-10} alkyl,
C_{1-4}acylamino C_{0-10} alkyl,
C_{0-10} alkylamino C_{0-10} alkyl,

di-(C_{1-10} alkyl)amino C_{0-10} alkyl,
arylC_{0-10} alkylamino C_{0-10} alkyl,
(arylC_{0-10} alkyl)$_2$amino C_{0-10} alkyl,
C_{3-8} cycloalkyl C_{0-10} alkylamino C_{0-10} alkyl,
C_{3-8} heterocyclyl C_{0-10} alkylamino C_{0-10} alkyl,
C_{3-8} heterocycloalkyl C_{0-10} alkylamino C_{0-10} alkyl,
C_{0-10} alkyl carbimidoylC_{0-10} alkyl,
(C_{1-10} alkyl)$_2$aminocarbonyl,
C_{1-10} alkoxy (carbonyl)$_{0-1}C_{0-10}$ alkyl,
C_{1-10}alkyloxy C_{0-10}alkyl,
(C_{1-10} alkyl)$_2$aminocarbonyloxy,
hydroxycarbonylC_{0-10}alkoxy,
(C_{1-10} alkyl)$_2$aminocarbonyloxy,
(aryl C_{0-10} alkyl)$_{1-2}$aminocarbonyloxy,
hydroxy C_{0-10}alkyl,
C_{1-10} alkylsulfonyl,
C_{1-10} alkylsulfonylamino,
aryl C_{1-10} alkylsulfonylamino,
C_{3-8} heterocyclyl C_{1-10} alkylsulfonylamino,
C_{3-8} heterocycloalkyl C_{1-10} alkylsulfonylamino,
C_{3-8} cycloalkyl C_{1-10} alkylsulfonylamino,
cyano,
nitro,
perfluoroC_{1-6}alkyl, and
perfluoroC_{1-6}alkoxy, and

wherein R^3 is optionally substituted with one or more groups chosen from hydrogen, OH, (C_{1-6})alkoxy, halogen, CO_2H, CN, O(C=O)C_1-C_6 alkyl, NO_2, trifluoromethoxy, trifluoroethoxy, -O(0-1)(C_{1-10})perfluoroalkyl, and NH_2.

15. A compound according to Claim 14, wherein X is hydrogen.

16. A compound according to Claim 15, wherein R^2 is chosen from:

halogen,

(carbonyl)$_{0-1}$C$_{1-10}$ alkyl,

(carbonyl)$_{0-1}$C$_{2-10}$ alkenyl,

(carbonyl)$_{0-1}$aryl C$_{0-10}$ alkyl,

C$_{3-8}$ cycloalkyl C$_{0-10}$ alkyl,

(C$_{3-8}$)heterocyclyl C$_{0-10}$ alkyl,

C$_{3-8}$ heterocycloalkyl C$_{0-10}$ alkyl,

C$_{0-10}$ alkylamino C$_{0-10}$ alkyl,

arylC$_{0-10}$ alkylamino C$_{0-10}$ alkyl,

C$_{3-8}$ cycloalkyl C$_{0-10}$ alkylamino C$_{0-10}$ alkyl,

C$_{3-8}$ heterocyclyl C$_{0-10}$ alkylamino C$_{0-10}$ alkyl,

C$_{3-8}$ heterocycloalkyl C$_{0-10}$ alkylamino C$_{0-10}$ alkyl,

C$_{3-8}$ cycloalkyl C$_{0-10}$ alkyl aminocarbonylamino,

(aryl C$_{1-10}$ alkyl)$_{1-2}$aminocarbonylamino,

C$_{0-10}$ alkyl aminocarbonylamino,

C$_{3-8}$ heterocyclyl C$_{0-10}$ alkyl aminocarbonylamino,

C$_{3-8}$ heterocycloalkyl C$_{0-10}$ alkyl aminocarbonylamino,

C$_{0-10}$ alkyl carbonylamino C$_{0-10}$ alkyl,

C$_{3-8}$ cycloalkyl C$_{0-10}$ alkyl carbonylamino C$_{0-10}$ alkyl,

C$_{3-8}$ heterocyclyl C$_{0-10}$ alkyl carbonylamino C$_{0-10}$ alkyl,

C$_{3-8}$ heterocycloalkyl C$_{0-10}$ alkyl carbonylamino C$_{0-10}$ alkyl,

aryl C$_{0-10}$ alkyl carbonylamino C$_{0-10}$ alkyl,

C$_{0-10}$ alkylcarboxy C$_{0-10}$ alkylamino,

C$_{1-10}$ alkoxy,

C$_{1-10}$alkyloxy C$_{0-10}$alkyl,

aryloxy,

C$_{3-8}$ cycloalkyloxy,

C$_{3-8}$ heterocyclyloxy,

C$_{3-8}$ heterocycloalkyloxy,

C$_{1-10}$ alkyloxy(carbonyl)$_{0-1}$C$_{0-10}$ alkylamino,

C_{3-8} heterocyclyl C_{0-10} alkyloxy(carbonyl)$_{0-1}$ C_{0-10} alkylamino,

C_{3-8} heterocycloalkyl C_{0-10} alkyloxy(carbonyl)$_{0-1}$ C_{0-10} alkylamino,

C_{3-8} cycloalkyl C_{0-10} alkyloxy(carbonyl)$_{0-1}$ C_{0-10} alkylamino,

aryl C_{0-10} alkyloxy(carbonyl)$_{0-1}$ C_{0-10} alkylamino,

hydroxy C_{0-10}alkyl,

C_{1-10} alkylthio,

C_{1-10} alkylsulfonyl,

aryl C_{0-10} alkylsulfonyl,

C_{3-8} heterocyclyl C_{0-10} alkylsulfonyl,

C_{3-8} heterocycloalkyl C_{0-10} alkylsulfonyl,

C_{3-8} cycloalkyl C_{0-10} alkylsulfonyl,

C_{1-10} alkylsulfonylamino,

aryl C_{1-10} alkylsulfonylamino,

C_{3-8} heterocyclyl C_{1-10} alkylsulfonylamino,

C_{3-8} heterocycloalkyl C_{1-10} alkylsulfonylamino,

C_{3-8} cycloalkyl C_{1-10} alkylsulfonylamino,

cyano,

nitro,

perfluoroC_{1-6}alkyl, and

perfluoroC_{1-6}alkoxy, and

wherein R^2 is optionally substituted with at least one substituent R^3.

17. A compound according to Claim 16, wherein at least two of U, V, W, and D are each N and provided that at least one of U, V, W, and D is CH

18. A compound according to Claim 1, selected from:

17β-[2-(butylamino)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[2-(anilino)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[2-(pyridin-2-ylamino)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[(2-methylamino)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-{[2-methyl(phenyl)amino]-1,3-thiazol-4-yl}-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-{[2-(4-fluorophenyl)amino]-1,3-thiazol-4-yl}-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[2-(benzylamino)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(isopropylamino)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(pyridin-3-ylamino)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-{[2-(2-fluorophenyl)amino]-1,3-thiazol-4-yl}-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-{[2-(methoxyethyl)amino]-1,3-thiazol-4-yl}-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-{2-[(2-piperid-1-ylethyl)amino]-1,3-thiazol-4-yl}-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-{[2-(t-butyl)amino]-1,3-thiazol-4-yl}-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-{[2-(4-cyanophenyl)amino]-1,3-thiazol-4-yl}-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-{2-[(cyclohexyl)amino]-1,3-thiazol-4-yl}-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-{2-[(pyridin-4-ylmethyl]amino)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(pyrimidin-2-ylamino)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(pyridin-4-ylamino)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-{2-[(cyclopropylmethyl)amino]-1,3-thiazol-4-yl}-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(propylamino)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(allylamino)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(heptylamino)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(octylamino)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(hexylamino)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-{2-[(5-methyl-1,2,3-thiadiazol-2-yl)amino]-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-{[2-(methoxypropyl)amino]-1,3-thiazol-4-yl}-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-{2-[(2-morphilin-1-ylethyl)amino]-1,3-thiazol-4-yl}-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-{2-[(2,2,2-trifluoroethyl)amino]-1,3-thiazol-4-yl}-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-{2-[(pyridin-2-ylethyl]amino)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(amino)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(guanidino)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(1-methyl-1H-imidazole-5-carboxamido)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(acetamido)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(phenyl carboxamido)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(thiephene-3-carboxamido)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(furan-2-carboxamido)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(pyrizine-2-carboxamido)-1,3-thiazol–4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(pyridine-2-carboxamido)-1,3-thiazol–4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(thiephene-2-carboxamido)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(pyridine-3-carboxamido)-1,3-thiazol–4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[2-(pyridine-4-carboxamido)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[2-(1-*t*-butyl-3-methyl-1H-pyrazole-5-carboxamido)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[2-(1-methyl-proline-2-carboxamido)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[2-(1-methyl-1H-imidazole-2-carboxamido)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[2-(1H-imidazole-2-carboxamido)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[2-(methanesulfonamido)-1 ,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[2-(ethyl carbamate)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[2-(isopropyl carbamate)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[2-(2-fluoroethyl carbamate)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[2-(*t*-butylcarbamate)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one

17β-[2-(ureyl)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[2-(N'-pyridin-2ylureyl)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[2-(N'-cyclopropylureyl)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[2-(N'-cyclohexylureyl)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[2-(N'-cyclohexylmethylureyl)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[2-(morpholine-4-carboxamido)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[2-(piperizine-1-carboxamido)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[N'-isopropylureyl)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[2-(pyridyl-3-ureyl)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-{2-[N'-(methylamino)ethethylureyl]-1,3-thiazol-4-yl}-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[2-(ureyl)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androstan-3-one;

17β-[2-(pyridin-2-yl)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androstan-3-one;

17β-[2-(methyl)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[2-(pyrid-3-yl)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[2-(ethyl acetyl)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[2-(acetonitrilyl)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[2-(2-chlorophenyl)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[2-(methyl)-1,3-imidazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[2-(phenyl)-1,3-imidazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[2-(3,5-dimethylpyrazol-1-yl)-1,3-imidazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[2-(aminoacetyl)-1,3-imidazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[5-(amino)- 1,2,4-triazol-3-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[5-(ureyl)- 1,2,4-triazol-3-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[5-(N-methyl-ureyl)- 1,2,4-triazol-3-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[5-(N,N-dimethyl-ureyl)- 1,2,4-triazol-3-yl]-4-methyl-4-aza-5α-androst-1-en-3-one; and
pharmaceutically acceptable salts and stereoisomers thereof.

19. A compound according to Claim 18, selected from:
17β-[2-(butylamino)-1,3–thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(anilino)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(pyridin-2-ylamino)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[(2-methylamino)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-{[2-methyl(phenyl)amino]-1,3-thiazol-4-yl}-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-{[2-(4-fluorophenyl)amino]-1,3-thiazol-4-yl}-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(benzylamino)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(isopropylamino)–1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(pyridin-3-ylamino)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-{[2-(2-fluorophenyl)amino]-1,3-thiazol-4-yl}-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-{[2-(methoxyethyl)amino]-1,3-thiazol-4-yl}-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-{2-[(2-piperid-1-ylethyl)amino]-1,3-thiazol-4-yl}-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-{[2-(t-butyl)amino]-1,3-thiazol-4-yl}-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-{[2-(4-cyanophenyl)amino]-1,3-thiazol-4-yl}-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-{2-[(cyclohexyl)amino]-1,3-thiazol-4-yl}-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-{2-[(pyridin-4-ylmethyl]amino)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(pyrimidin-2-ylamino)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(pyridin-4-ylamino)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-{2-[(cyclopropylmethyl)amino]-1,3-thiazol-4-yl}-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(propylamino)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(allylamino)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(heptylamino)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(octylamino)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(hexylamino)-1,3–thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-{2-[(5-methyl-1,2,3-thiadiazol-2-yl)amino]-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst–1-en-3-one;
17β-{[2-(methoxypropyl)amino]-1,3-thiazol-4-yl}-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-{2-[(2-morphilin-1-ylethyl)amino]-1,3-thiazol-4-yl}-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-{2-[(2,2,2-trifluoroethyl)amino]-1,3-thiazol-4-yl}-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-{2-[(pyridin-2-ylethyl]amino)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;

17β-[2-(amino)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(guanidino)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(1-methyl-1H-imidazole-5-carboxamido)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(acetamido)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(phenyl carboxamido)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(thiephene-3-carboxamido)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(furan-2-carboxamido)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(pyrizine-2-carboxamido)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(pyridine-2-carboxamido)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(thiephene-2-carboxamido)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(pyridine-3-carboxamido)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(pyridine-4-carboxamido)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(1-*t*-butyl-3-methyl-1H-pyrazole-5-carboxamido)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(1-methyl-proline-2-carboxamido)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(1-methyl-1H-imidazole-2-carboxamido)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(1H–imidazole-2-carboxamido)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(methanesulfonamido)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(ethyl carbamate)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(isopropyl carbamate)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en–3-one;
17β-[2-(2-fluoroethyl carbamate)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(*t*-butylcarbamate)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one
17β-[2-(ureyl)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(N'-pyridin-2ylureyl)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en–3-one;
17β-[2-(N'-cyclopropylureyl)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en–3-one;
17β-[2-(N'-cyclohexylureyl)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(N'-cyclohexylmethylureyl)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(morpholine-4-carboxamido)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(piperizine-1-carboxamido)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[N'-isopropylureyl)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(pyridyl-3-ureyl)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-{2-[N'-(methylamino)ethethylureyl]-1,3-thiazol-4-yl}-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(ureyl)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androstan-3-one;
17β-[2-(pyridin-2-yl)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androstan-3-one;

17β-[2-(methyl)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(pyrid-3-yl)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(ethyl acetyl)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(acetonitrilyl)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(2-chlorophenyl)-1,3-thiazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one; and
pharmaceutically acceptable salts and stereoisomers thereof.

20. A compound according to Claim 19, selected from: 17β-[2-(methyl)-1,3-imidazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(phenyl)-1,3-imidazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(3,5-dimethylpyrazol-1-yl)-1,3-imidazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[2-(aminoacetyl)-1,3-imidazol-4-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[5-(amino)- 1,2,4-triazol-3-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[5-(ureyl)- 1,2,4-triazol-3-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[5-(N-methyl-ureyl)- 1,2,4-triazol-3-yl]-4-methyl-4-aza-5α-androst-1-en-3-one;
17β-[5-(N,N-dimethyl-ureyl)- 1,2,4-triazol-3-yl]-4-methyl-4-aza-5α-androst-1-en-3-one; and
pharmaceutically acceptable salts and stereoisomers thereof.

21. A method for modulating a function mediated by the androgen receptor in a mammal in need of such modulation comprising administering a therapeutically effective amount of a compound of Claim 1 or a pharmaceutically acceptable salt or a stereoisomer thereof.

22. A method of activating the function of the androgen receptor in a mammal in need of such activation comprising administering a therapeutically effective amount of a compound of Claim 1 or a pharmaceutically acceptable salt or a stereoisomer thereof.

23. A method of Claim 22, wherein said function mediated by the androgen receptor is activated in bone or muscle tissue and blocked in the prostate or the uterus.

24. A method of treating a condition in a mammal which is caused by androgen deficiency, which can be ameliorated by androgen replacement, or which can be increased by androgen replacement, which condition is selected from weakened muscle tone, osteoporosis, osteopenia, glucocorticoid-induced osteoporosis, periodontal disease, bone fracture, bone damage following bone reconstructive surgery, sarcopenia, frailty, aging skin, male hypogonadism, postmenopausal symptoms in

women, atherosclerosis, hypercholesterolemia, hyperlipidemia, obesity, aplastic anemia and other hematopoietic disorders, inflammatory arthritis and joint repair, HIV-wasting, prostate cancer, benign prostatic hyperplasia (BPH), abdominal adiposity, metabolic syndrome, type II diabetes, cancer cachexia, Alzheimer's disease, muscular dystrophies, cognitive decline, sexual dysfunction, sleep apnea, depression, premature ovarian failure, and autoimmune disease, comprising administering to the mammal in need of such treatment, a therapeutically effective amount of a compound according to Claim 1or a pharmaceutically acceptable salt or a stereoisomer thereof.

25. A method according to Claim 24, wherein said condition is osteoporosis.

26. A method of treating osteoporosis in a mammal in need thereof, comprising administering a therapeutically effective amount of a compound according to Claim 1 or a pharmaceutically acceptable salt or a stereoisomer thereof.

27. A method of Claim 26, further comprising the administration of an agent selected from:

1) an estrogen or an estrogen derivative, alone or in combination with a progestin or progestin derivative,
2) a bisphosphonate,
3) an antiestrogen or a selective estrogen receptor modulator,
4) an $\alpha v\beta 3$ integrin receptor antagonist,
5) a cathepsin K inhibitor,
6) an HMG-CoA reductase inhibitor,
7) an osteoclast vacuolar ATPase inhibitor,
8) an antagonist of VEGF binding to osteoclast receptors,
9) an activator of peroxisome proliferator-activated receptor γ,
10) calcitonin,
11) a calcium receptor antagonist,
12) parathyroid hormone or analog thereof,
13) a growth hormone secretagogue,
14) human growth hormone,
15) insulin-like growth factor,
16) a p38 protein kinase inhibitor,

17) bone morphogenetic protein,
18) an inhibitor of BMP antagonism,
19) a prostaglandin derivative,
20) vitamin D or vitamin D derivative,
21) vitamin K or vitamin K derivative,
22) ipriflavone,
23) fluoride salts,
24) dietary calcium supplement, and
25) osteoprotegerin.

28. The method according to Claim 27, wherein:

1) the estrogen or estrogen derivative, alone or in combination with a progestin or progestin derivative, is selected from conjugated estrogen, equine estrogen, 17β-estradiol, estrone, 17β-ethynyl estradiol, 17β-ethynyl estradiol with at least one agent selected from norethindrone and medroxyprogesterone acetate;
2) the bisphosphonate is selected from alendronate, clodronate, etidronate, ibandronate, incadronate, minodronate, neridronate, olpadronate, pamidronate, piridronate, risedronate, tiludronate, and zoledronate;
3) the antiestrogen or selective estrogen receptor modulator is selected from raloxifene, clomiphene, zuclomiphene, enclomiphene, nafoxidene, CI-680, CI-628, CN-55,945-27, Mer-25, U-11,555A, U-100A, tamoxifen, lasofoxifene, toremifene, azorxifene, EM-800, EM-652, TSE 424, droloxifene, idoxifene, and levormeloxifene;
4) the HMG-CoA reductase inhibitor is selected from lovastatin, simvastatin, dihydroxy-open acid simvastatin, pravastatin, fluvastatin, atorvastatin, cerivastatin, rosuvastatin, pitavastatin, and nisvastatin;
5) calcitonin is salmon calcitonin administered as a nasal spray;
6) bone morphogenetic protein is selected from BMP 2, BMP 3, BMP 5, BMP 6, BMP 7, TGF beta, and GDF5;
7) insulin-like growth factor is selected from IGF I and IGF II alone or in combination with IGF binding protein 3;
8) the prostaglandin derivative is selected from agonists of prostaglandin receptors EP_1, EP_2, EP_4, FP, and IP;
9) the fibroblast growth factor is selected from aFGF and bFGF;

10) parathyroid hormone (PTH) or PTH analog is selected from PTH subcutaneous injection, human PTH (1-84), human PTH (1-34), and other partial sequences, native or with substitutions;

11) vitamin D or vitamin D derivative is selected from natural vitamin D, 25-OH-vitamin D3, 1α,25(OH)2 vitamin D3, 1α-OH-vitamin D3, 1α-OH-vitamin D2, dihydrotachysterol, 26,27-F6-1α,25(OH)2 vitamin D3, 19-nor-1α,25(OH)2vitamin D3, 22-oxacalcitriol, calcipotriol, 1α,25(OH)2-16-ene-23-yne-vitamin D3(Ro 23-7553), EB1089, 20-epi-1α,25(OH)2 vitamin D3, KH1060, ED71, 1α,24(S)-(OH)2 vitamin D3, and 1α,24(R)-(OH)2 vitamin D3;

12) the dietary calcium supplement is selected from calcium carbonate, calciumcitrate, and natural calcium salts; and

13) the fluoride salts are chosen from sodium fluoride and monosodium fluorophosphate (MFP); and pharmaceutically acceptable salts or stereoisomers thereof.

29. The method according to Claim 28, wherein the bisphosphonate is alendronate monosodium trihydrate or alendronate monosodium monohydrate.

30. The method of Claim 27, wherein said agent is selected from:

1) an estrogen or an estrogen derivative, alone or in combination with a progestin or progestin derivative,
2) a bisphosphonate,
3) an antiestrogen or a selective estrogen receptor modulator,
4) an αvβ3 integrin receptor antagonist,
5) a cathepsin K inhibitor,
6) an osteoclast vacuolar ATPase inhibitor,
7) calcitonin,
8) osteoprotegrin, and
9) parathyroid hormone or analog thereof.

31. A pharmaceutical composition comprising a therapeutically effective amount of a compound of Claim 1 and a pharmaceutically acceptable carrier.

32. A composition of Claim 31, further comprising an active ingredient selected from:

1) an estrogen or an estrogen derivative, alone or in combination with a progestin or progestin derivative,
2) a bisphosphonate,
3) an antiestrogen or a selective estrogen receptor modulator,
4) an $\alpha v\beta 3$ integrin receptor antagonist,
5) a cathepsin K inhibitor,
6) an HMG-CoA reductase inhibitor,
7) an osteoclast vacuolar ATPase inhibitor,
8) an antagonist of VEGF binding to osteoclast receptors,
9) an activator of peroxisome proliferator-activated receptor γ,
10) calcitonin,
11) a calcium receptor antagonist,
12) parathyroid hormone or analog thereof,
13) a growth hormone secretagogue,
14) human growth hormone,
15) insulin-like growth factor,
16) a p38 protein kinase inhibitor,
17) bone morphogenetic protein,
18) an inhibitor of BMP antagonism,
19) a prostaglandin derivative,
20) vitamin D or vitamin D derivative,
21) vitamin K or vitamin K derivative,
22) ipriflavone,
23) fluoride salts,
24) dietary calcium supplement, and
25) osteoprotegerin.

33. A composition of Claim 32, wherein said bisphosphonate is alendronate.

34. A method of inhibiting bone resorption in a mammal in need thereof, comprising administering a therapeutically effective amount of a compound according to Claim 1 or a pharmaceutically acceptable salt or a stereoisomer thereof.

35. A method of increasing Bone Mineral Density in a mammal in need thereof, comprising administering a therapeutically effective amount of a compound according to Claim 1 or a pharmaceutically acceptable salt or a stereoisomer thereof.

36. A method of reducing the risk of vertebral or non-verterbral fractures in a mammal in need thereof, comprising administering a therapeutically effective amount of a compound according to Claim 1 or a pharmaceutically acceptable salt or a stereoisomer thereof.

37. A method of effecting a bone turnover marker in a mammal in need thereof, comprising administering a therapeutically effective amount of a compound according to Claim 1 or a pharmaceutically acceptable salt or a stereoisomer thereof, wherein said bone turnover marker is selected from urinary C-telopeptide degradation products of type I collagen (CTX), urinary N-telopeptide cross-links of type I collagen (NTX), DXA, and DPD.

38. A pharmaceutical composition made by combining a compound according to Claim 1 and a pharmaceutically acceptable carrier.

39. A process for making a pharmaceutical composition comprising combining a compound according to Claim 1 and a pharmaceutically acceptable carrier.

40. A method of treating or preventing an arthritic condition in a mammal in need thereof, comprising adminsitering a therapeutically effective amount of a compound according to Claim 1 or a pharmaceutically acceptable salt or a stereoisomer thereof.

41. A method of Claim 40, wherein the arthritic conditions is selected from rheumatoid arthritis and osteoarthritis.